

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A measurement apparatus for measuring at least one parameter of an object ~~or area~~, the measurement apparatus comprising:

 at least one ~~or more~~ imaging and display devices for creating device configured to create a three-dimensional map ~~and displaying an image of said object or area~~;

 at least one display device configured to display an image of said object based at least in part on said three-dimensional map; and

 a mapping apparatus for mapping configured to map a virtual shape onto said image and ~~substantially matching~~ to substantially match said virtual shape to said three-dimensional map of said object ~~or area~~,

 wherein the measurement apparatus ~~[[being]]~~ is adapted to determine from said ~~[[image]]~~ virtual shape at least one parameter of said object ~~or area~~, said parameter comprising at least one of a length, surface area ~~[[or]]~~ and volume of said object ~~or area~~.
2. (Currently Amended) A measurement apparatus according to claim 1, ~~further comprising an selection apparatus for marking or otherwise selecting the object or area to be measured within an image, including~~ outline definition apparatus ~~for defining~~ configured to define within said image an outline of ~~[[the]]~~ a shape of said object ~~or area~~.
3. (Currently Amended) A measurement apparatus according to claim 2, ~~further comprising a matching apparatus for creating~~ configured to create a virtual shape which substantially matches said outline ~~and for mapping said virtual shape onto said image of said object or area~~.
4. (Currently Amended) A measurement apparatus according to claim 1, ~~including~~ further comprising an alteration apparatus including a function for altering at least one ~~or more~~ of the size, angle [[or]] and pitch of said virtual shape so as to substantially match it to said [[image]] three-dimensional map of said object or area.

5. (Currently Amended) A measurement apparatus according to claim 4,
wherein said alteration apparatus is adapted such that the function of altering said at
least one of size, angle ~~and/or~~ and pitch of said virtual shape is user-controllable.

6. (Currently Amended) A measurement apparatus ~~according to claim 1,~~
~~including one or more~~ for measuring at least one parameter of an object, the
measurement apparatus comprising:

at least one imaging device configured to create a three-dimensional map of said
object;

at least one display device configured to display an image of said object based
at least in part on said three-dimensional map; and

a mapping apparatus configured to map a virtual shape onto said image and to
substantially match said virtual shape to said three-dimensional map of said object,

wherein the measurement apparatus is adapted to determine from said virtual
shape at least one parameter of said object, said parameter comprising at least one of a
length, surface area and volume of said object,

further comprising at least one calculation devices ~~for calculating and displaying~~
device configured to calculate an estimate of materials required to cover said object ~~or~~
~~area, said one or more calculation devices preferably being arranged to take into~~
~~account standard material values and/or quantities when calculating said estimate.~~

7. (Currently Amended) A method of measuring an object ~~or area,~~ the
method comprising: ~~the steps of~~

creating a three-dimensional map of said object; ~~[[and]]~~

displaying an image of ~~[[an]]~~ said object or area to be measured, based at least
in part on said three-dimensional map;

creating a virtual shape based on at least one of said three-dimensional map and
said image;

mapping ~~[[a]]~~ said virtual shape onto said image ~~[[,]]~~ ;

substantially matching said virtual shape to said three-dimensional map of said
object ~~or area~~ being measured ~~[[,]]~~ ; and

determining from said virtual shape at least one of a length, surface area ~~[[or]]~~ and volume of said object ~~or area~~.

8. (Currently Amended) A method according to claim 7, further comprising ~~the step of marking or otherwise selecting said object or area by~~ defining an outline within said image of ~~[[the]]~~ a shape of said object ~~or area~~.

9. (Currently Amended) A method according to claim 8, ~~further comprising~~ wherein the step of creating a virtual shape comprises creating a virtual shape which substantially matches said outline ~~and mapping said virtual shape onto said image of said object or area being measured~~.

10. (Currently Amended) A method according to claim 7, further comprising ~~the step of altering~~ at least one ~~or more~~ of the size, angle ~~[[or]]~~ and pitch of said virtual shape so as to substantially match it to said ~~[[image]]~~ three-dimensional map of said object ~~or area~~ being measured.

11. (Currently Amended) A measurement apparatus for measuring at least one object, comprising:

at least one ~~or more~~ image capture ~~devices for capturing~~ device configured to capture at least one image of said object ~~or area~~; i

a three-dimensional map creation apparatus configured to create a three-dimensional map of said object from said at least one image of said object captured by said at least one image capture device;

a display apparatus for displaying configured to display in a two-dimensional image space ~~[[an]]~~ a two-dimensional image of said object based on at least one of said three-dimensional map and said at least one image captured by said image capture device ~~or area, the apparatus being arranged to create a three-dimensional map of said object or area from at least one image captured by said one or more image capture devices, the measurement apparatus further comprising~~ i

a shape matching apparatus for matching a configured to map a virtual shape onto said two-dimensional image and to substantially match said virtual shape to said ~~[[image]]~~ three-dimensional map of said object ~~or area as displayed in said two-dimensional image space~~; i and

a calculation apparatus for determining from said displayed image to determine from said virtual shape at least one of a length, surface area ~~[[or]]~~ and volume of said object ~~or area~~.

12. (Currently Amended) A measurement apparatus according to claim 11, ~~comprising image manipulation apparatus for creating one or more~~ wherein said display apparatus is configured to display said two-dimensional ~~images~~ image of said object ~~or area from based on~~ said three-dimensional map.

13. (Currently Amended) A measurement apparatus according to claim ~~[[11]]~~ 12, ~~comprising image manipulation apparatus for creating a~~ wherein said display apparatus is configured to display said two-dimensional image of said object ~~or area from a selected or selectable perspective~~ ~~[[from]]~~ of said three-dimensional map.

14. (Currently Amended) A measurement apparatus according to claim 13, wherein said shape matching apparatus is adapted to match ~~[[a]]~~ said virtual shape to said ~~[[two-]]~~ three-dimensional image ~~[[from]]~~ based on the selected perspective.

15. (Currently Amended) An apparatus for estimating ~~or calculating~~ a quantity of chosen material required to cover an object ~~or area~~, the apparatus comprising:

at least one or more imaging devices for creating device configured to create a three-dimensional map of said object ~~or area~~; i

a shape matching apparatus for matching a configured to match a virtual shape to said three dimensional map of said object ~~or area~~; i

a measurement apparatus for determining configured to determine at least one of a length, surface area ~~[[or]]~~ and volume of said object ~~or area~~; i and

a calculation apparatus for estimating or calculating configured to estimate from said matched shape ~~[[,]]~~ the quantity of chosen material required to cover said object ~~or area~~.

16. (New) A measurement apparatus as in claim 6, wherein said calculation device is configured to calculate said estimate based at least in part on standard material values and quantities.

17. (New) A measurement apparatus as in claim 6, wherein said materials comprise paint.

18. (New) A measurement apparatus as in claim 1, wherein said parameter comprises said surface area.

19. (New) A measurement apparatus as in claim 1, wherein said parameter comprises said volume.